

APPROVED TMDLS
Bitterroot Headwaters Planning Area

17 pollutant TMDLS completed
5 Determinations made that no pollutant TMDL was needed

Waterbody Name*	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	WLA LA	Supporting Documentation (not an exhaustive list of supporting documents)
Buck Creek MT76H002_060	Siltation Suspended Solids	% subsurface fines < 2 mm = 11-27%. % subsurface fines < 6 mm = 16-38%. D50=7-64 mm. Clinger Richness ≥ 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 50% reduction in total load.	WLA = 0 LA = 68% reduction in loading from roads, and a 75% reduction in loading from human-caused bank erosion. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“Water Quality Restoration Plan and Total Maximum Daily Loads for the Bitterroot Headwaters Planning Area” MT DEQ (October 2005)
Ditch Creek MT76H003_060	Siltation Suspended Solids	% subsurface fines < 2 mm = 11-27%. % subsurface fines < 6 mm = 16-38%. D50=7-64 mm. Clinger Richness ≥ 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 60% reduction in total load.	WLA = 0 LA = 63% reduction in loading from roads, and a 75% reduction in loading from human-caused bank erosion. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“
Hughes Creek MT76H003_040	Siltation Suspended Solids	% subsurface fines , 2mm = 14-32% for C4 stream types, 11-27% for B4 stream types. % subsurface fines , 6 mm = 17-49% for C4 stream types, 16-38% for B4 stream types. D50 = 3-47 mm for C4 stream types, 7-64 mm for B4 stream types. Clinger Richness ≥ 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 3% reduction in total load.	WLA = 0 LA = 36% reduction in loading from roads, and a 75% reduction in loading from human-caused bank erosion. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“

Waterbody Name*	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	WLA LA	Supporting Documentation (not an exhaustive list of supporting documents)
	Thermal Modification	In-stream temperature target of 15 degrees C. Supplemental indicator of 78% effective shade.	Sum of the allocations to the known human-caused sediment sources. This equates to a 50% reduction in thermal loading from the known anthropogenic sources and further equates to 375 btu/ft ² /day.	WLA=0 LA=100% reduction in shade loss from fire and timber harvest. PLUS A performance-based allocation to future sources and phased allocation study to address roads, impervious surfaces and mining.	“
Nez Perce Fork Bitterroot River MT76H003_020	Thermal Modification	In-stream temperature targets of 12 (upper reach) and 15 (lower reach) degrees C. Supplemental indicator of 45% effective shade.	Sum of the allocations to the known human-caused thermal sources. This equates to a 11% reduction in thermal loading from the known anthropogenic sources and further equates to 949 btu/ft ² /day.	WLA=0 LA= 100% reduction in shade loss from timber harvest. PLUS A performance-based allocation to future sources and phased allocation study to address roads, impervious surfaces and mining.	“
Overwhich Creek MT76H003_050	Thermal Modification	In-stream temperature targets of 12 (upper reach) and 15 (lower reach) degrees C. Supplemental indicator of 45% effective shade.	Sum of the allocations to the known human-caused thermal sources. This equates to a 46% reduction in thermal loading from the known anthropogenic sources and further equates to 456 btu/ft ² /day.	WLA=0 LA=100% reduction in shade loss from fire. PLUS A performance-based allocation to future sources and phased allocation study to address roads, impervious surfaces and mining.	“
	Lead (Metals)	Justification for no need of a lead TMDL. Numeric criteria for lead currently met.			

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West Fork Bitterroot River MT76H003_010	Siltation	% subsurface fines , 2mm = 6-20% for C4 stream type. % subsurface fines , 6 mm = 17-49% for C4 stream type. D50 = 3-47 mm for C4 stream type. Clinger Richness ≥ 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 5% reduction in total load.	WLA=0 LA=A 57% reduction in sediment loading from forest roads and a 75% reduction in sediment from eroding stream banks. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“
	Thermal Modification	In-stream temperature targets of 12 (upper reach) and 15 (lower reach) degrees C. Supplemental indicator of 45% effective shade.	Phased allocation to address roads and mining. Currently these sources are potentially irretrievable commitment of resources.	WLA=0 LA = Phased	
	Noxious Aquatic Plants	Justification for no need of a nutrient TMDL. Narrative criteria for nutrients currently met.			
Moose Creek MT76H002_040	Siltation Nutrients	Justification for no need of a siltation and nutrient TMDL. Narrative criteria for siltation and nutrients are currently met.			“
Reimel Creek MT76H002_020	Siltation Suspended Soilds	% subsurface fines , 2mm = 14-32% for C4 stream types, 11-27% for B4 stream types. % subsurface fines , 6 mm = 17-49% for C4 stream types, 16-38% for B4 stream types. D50 = 3-47 mm for C4 stream types, 7-64 mm for B4 stream types. Clinger Richness ≥ 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 1% reduction in total load.	WLA = 0 LA = 65% reduction in loading from roads. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“
Gilbert Creek MT76H0002_080	Siltation Suspended Solids	% subsurface fines , 2mm = 11-27% for B4 stream types. % subsurface fines , 6 mm = 16-38% for B4 stream types. D50 = 7-64 mm for B4 stream types. Clinger Richness ≥ 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 2% reduction in total load.	WLA = 0 LA = 63% reduction in loading from roads, and a 75% reduction in loading from human-caused bank erosion. PLUS a performance-based allocation to	“

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				future sources and additional study to identify other potentially significant sources	
Laird Creek MT76H0002_070	Siltation Suspended Solids	% subsurface fines , 2mm = 11-27% for B4 stream types. % subsurface fines , 6 mm = 16-38% for B4 stream types. D50 = 7-64 mm for B4 stream types. Clinger Richness \geq 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 2% reduction in total load.	WLA = 0 LA = 63% reduction in loading from roads, and a 75% reduction in loading from human-caused bank erosion. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“
East Fork Bitterroot River MT76H002_010	Siltation	% subsurface fines, 2mm = 14-32% for C4 channel types, 6-20% for C3 channel types, 5-19% for B3 channel types. % subsurface fines, 6mm = 17-49% for C4 channel types, 8-24% for C3 channel types, and 7-25% for B3 channel types. D50 = 3-47mm for C4 channel types, 71-89mm for C3 channel types, and 64-256mm for B3 channel types. Clinger Richness > 14.	Sum of the allocations to the known human-caused sediment sources. This equates to a 2% reduction in total load.	WLA = 0 LA = 42% reduction in loading from roads, and a 75% reduction in loading from human-caused bank erosion. PLUS a performance-based allocation to future sources and additional study to identify other potentially significant sources	“
	Thermal Modification	In-stream temperature targets of 12 (upper reach) and 15 (lower reach) degrees C. Supplemental indicator of 55% effective shade.	Sum of the allocations to the known human-caused thermal sources. This equates to a 35% reduction in thermal loading from the known anthropogenic sources and further equates to 770 btu/ft ² /day.	WLA=0 LA= 100% reduction in shade loss from timber harvest. PLUS A performance-based allocation to future sources and phased allocation study to address roads, impervious surfaces and mining.	
Meadow Creek MT76H002_030	Other Habitat Alterations	Non-pollutant Impairment. No TMDL required.			“
Deer Creek MT76H003_030	Other Habitat Alterations	Non-pollutant Impairment. No TMDL required.			“
Martin Creek MT76H002_050	Flow Alterations	Non-pollutant Impairment. No TMDL required.			“
	Thermal Modifications				